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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/690,330	10/17/2000	Hironori Kikkawa	NEC 00FN054	3479

7590

02/27/2003

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EXAMINER

DUONG, THOI V

ART UNIT

PAPER NUMBER

2871

DATE MAILED: 02/27/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/690,330

Applicant(s)

KIKKAWA ET AL.

Examiner

Thoi V Duong

Art Unit

2871

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 December 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 12-19 ~~is/are~~ pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 16, 17 and 19 ~~is/are~~ allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☒ Claim(s) 15 and 18 ~~is/are~~ objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This office action is in response to the Amendment, Paper No. 7, filed December 02, 2002.

Accordingly, claims 16 and 19 were amended. Currently, claims 12-19 are pending in this application.

Response to Arguments

2. Applicant's arguments with respect to claims 12-15 and 18 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 12-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Ooi et al. (USPN 5,754,260).

As shown in Fig. 26, Ooi discloses a reflection-type color liquid crystal display apparatus comprising:

a liquid crystal driving element formation substrate 833 on which a liquid crystal driving element 839 is formed;

an opposite substrate 831 which is opposite to said liquid crystal driving element formation substrate;

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a liquid crystal 832 sandwiched between said liquid crystal driving element formation substrate and said opposite substrate;

a color filter 837 provided on the driving element formation substrate (col. 39, lines 14-25); and

a light scattering mechanism provided at the liquid crystal side surface of the opposite substrate (col. 39, lines 60-67),

wherein said opposite substrate has a transparent insulation substrate (col. 39, line 60-61), and said light scattering mechanism comprises an uneven portion formed at the surface of the liquid crystal side of said transparent insulation substrate; and

wherein said light scattering mechanism comprises a flattened film 835 formed to cover the uneven portion formed at the surface of the transparent insulation substrate.

Allowable Subject Matter

5. Claims 15 and 18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims (see reasons for allowance below).

6. Claims 16, 17 and 19 are allowed.

The following is an examiner's statement of reasons for allowance:

None of the prior art of record suggests or discloses alone or in combination that a reflection-type color liquid crystal display apparatus comprises:

“a liquid crystal driving element formation substrate on which a liquid crystal driving element is formed;

an opposite substrate which is opposite to said liquid crystal driving element formation substrate;

a liquid crystal sandwiched between said liquid crystal driving element formation substrate and said opposite substrate;

a color filter provided on the driving element formation substrate; and

a light scattering mechanism provided at the liquid crystal side surface of the opposite substrate”

in combination with *“said light scattering mechanism comprises an uneven insulation film formed on the surface of the liquid crystal side of a transparent insulation substrate.”*

The most relevant references, USPN 5,754,260 of Ooi et al., fails to disclose or suggest a light scattering mechanism comprising an uneven insulation film formed on the surface of the liquid crystal side of a transparent insulation substrate. The Ooi’s reference only discloses a light scattering mechanism comprising an uneven conductive film formed on the surface of the liquid crystal side of a transparent insulation substrate.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance.”

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant’s disclosure.

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8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thoi V. Duong whose telephone number is (703) 308-3171. The examiner can normally be reached on Monday-Friday from 8:00 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Kim, can be reached at (703) 305-3492.

Thoi Duong

02/15/2003

100-443888-2000